

07-14-05

Express Mail No. ED 678 549 984 US *AF*



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 09/964,927 ✓ Confirmation No. : 2183  
First Applicant : Wil McCarthy Art Unit : 2874  
Filed : 26 September 2001 Examiner : Daniel J. Petkovsek  
Title : Fiber incorporating quantum dots as programmable dopants  
Docket No. : 027-040001US  
Customer No. : 33486

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**CERTIFICATE OF MAILING BY EXPRESS MAIL**


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The undersigned hereby certifies that the attached

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2. Applicant Initiated Interview Request Form (1 page);
3. Interview Summary (3 pages);
4. Amendment and Response (11 pages);
5. this Certificate of Mailing by "Express Mail" (37 CFR 1.10) (1 page); and
6. return postcard,

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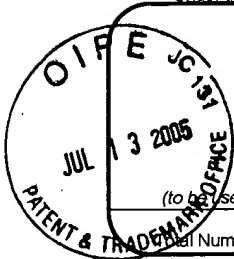
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PTO/SB/21 (09-04)

Approved for use through 07/31/2006. OMB 0651-0031

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**TRANSMITTAL  
FORM**

(to be used for all correspondence after initial filing)

Application Number	09/964,927
Filing Date	26 September 2001
First Named Inventor	Wil McCarthy
Art Unit	2874
Examiner Name	Daniel J. Petkovsek
Attorney Docket Number	027-040001US
Number of Pages in This Submission	

**ENCLOSURES (Check all that apply)**

<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment/Reply <input checked="" type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement  <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers  <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC  <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences  <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)  <input type="checkbox"/> Proprietary Information  <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
<b>Remarks</b> 1. Applicant Initiated Interview Request Form; 2. Interview Summary (3 pages); 3. Certificate of mailing by Express Mail; 4. Postcard		

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm Name	Heimbacher & Assoc., LLC		
Signature			
Printed name	Brad J. Hatzenbach		
Date	13 July 2005	Reg. No.	42,642

**CERTIFICATE OF TRANSMISSION/MAILING**

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:			
Signature			
Typed or printed name		Date	

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Express Mail Label No.: ED 678 549 984 US

Attorney Docket No.: 027-040001US

PTOL-413A (09-04)  
Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

### Applicant Initiated Interview Request Form

Application No.: 09/964,927

First Named Applicant: McCarthy, Wil

Examiner: Daniel Petkovsek

Art Unit: 2874

Status of Application: Pending - Under Final

#### Tentative Participants:

(1) Brad J. Hattenbach

(2) Daniel Petkovsek

(3) John D. Lee

(4)

Proposed Date of Interview: 22 June 2005

Proposed Time: 11:00 a.m. (AM/PM)  
EDT

#### Type of Interview Requested:

(1) ☒ Telephonic

(2) ☐ Personal

(3) ☐ Video Conference

Exhibit To Be Shown or Demonstrated: ☐ YES

☒ NO

If yes, provide brief description: \_\_\_\_\_

### Issues To Be Discussed

Issues (Rej., Obj., etc)	Claims/ Fig. #s	Prior Art	Discussed	Agreed	Not Agreed
(1) Rejections	All Pending	Yerushalmi et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(2) _____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(3) _____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(4) _____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Continuation Sheet Attached					

#### Brief Description of Arguments to be Presented:

Yerushalmi et al. is not an effective prior art reference because the subject matter relied upon in Yerushalmi et al. for the rejection is not entitled to the necessary priority date.

An interview was conducted on the above-identified application on 22 June 2005.

**NOTE:** This form should be completed by applicant and submitted to the examiner in advance of the interview (see MPEP § 713.01).

This application will not be delayed from issue because of applicant's failure to submit a written record of this interview. Therefore, applicant is advised to file a statement of the substance of this interview (37 CFR 1.133(b)) as soon as possible.

Applicant/Applicant's Representative Signature

Brad J. Hattenbach

Typed/Printed Name of Applicant or Representative

42,642

Registration Number, if applicable

Examiner/SPE Signature

This collection of information is required by 37 CFR 1.133. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 09/964,927 Confirmation No. : 2183  
Applicants : McCARTHY, Wil Art Unit : 2874  
SNYDER, Gary E.  
Filed : 26 SEPTEMBER 2001 Examiner : Daniel J. Petkovsek  
Title : Fiber incorporating quantum dots as programmable dopants  
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INTERVIEW SUMMARY

Pursuant to 37 C.F.R. § 1.133(b), the following is a summary of an interview between the undersigned attorney for Applicants and examiners Daniel J. Petkovsek and SPE John D. Lee that occurred on 22 June 2005. An Applicant Initiated Interview Request Form is enclosed herewith as the interview request was scheduled by telephone.

The interview was conducted with regard to the final Office action dated 8 June 2005 in U.S. Patent application no. 09/964,927.

The Office's prima facie burden for presenting an anticipation rejection was initially discussed, specifically in the context of reaching back to a priority document to support an earlier effective date than the filing date or publication date of the reference asserted. The examiners stated their understanding that in order to support a rejection, the subject matter meeting limitations of the claims must be found in the priority document as well as in the cited reference.

Attorney for Applicants noted that the rejections as stated in the first Office action after withdrawal based on U.S. application publication no. 2003/0107927 to Yerushalmi et al. (the '927 publication) were not entitled to the priority date of a counterpart provisional application filing, U.S. provisional application no. 60/274,635. Attorney for Applicants' noted that the rejections are based on subject matter in the '927 publication that is not found in the '635 application.

There was a discussion about whether Applicants' obligation to "fully respond" to the Office action included responding to each "substantive" ground for rejection of each claim. Attorney for Applicants asserted that there was no such obligation when a prima facie case had not been presented and the reference was not entitled to an earlier effective date for the subject matter cited.

The discussion next concerned the proper definition of a "quantum dot." Attorney for Applicants questioned the source of the definition as there was no attribution for the definition in the final Office action. The examiners stated that their definition of a quantum dot was taken from U.S. Patent No. 5,530, 263, which was not cited and is not a reference of record in the prosecution of this application. The examiners' definition omitted the most significant attribute of a quantum dot, namely that the structure must confine one or more electrons in three dimensions within a potential barrier.

The examiners suggested that a quantum dot could be a single atom with alterations to its valence shells. Attorney for Applicants corrected this misunderstanding by explaining that a quantum dot is not an atom at all, and while it confines a collection of electrons or other charge carriers, there is no nucleus to a quantum dot.. Because of the small size of the confinement area, the electrons organize themselves as if they were valence shells similar to surrounding the nucleus of an atom. However, there are no protons about which the electrons revolve.

The claims were next discussed in view of the '635 application. Attorney for Applicants asserted out that none of the elements of the rejected claims could be found in the '635 application. Attorney for Applicants identified a list of terms used in the claims of the present application, most significantly "quantum dot," that cannot be found in the '635 application. Attorney for Applicants also discussed how the "molecular engine" discussed in the '927 publication, and equated to Applicants' invention in the Office action, was an entirely different structure.

The interview concluded and SPE Lee he felt that the examiners had a better understanding of the subject matter of the invention. SPE Lee further stated that he would assure that Applicants' written response to the final Office would be allocated a thorough and substantive review.

Appl. No.: 09/964,927  
Interview Summary Dated: 13 July 2005

Express Mail Label No.: ED 678 549 984 US  
Attorney Docket No.: 027-040001US

Respectfully submitted this 13<sup>th</sup> day of July 2005.

A handwritten signature in black ink, appearing to read "Brad J. Hattenbach", written over a horizontal line.

Brad J. Hattenbach, Esq.  
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Customer No. 33486

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Docketing